

ITEM: 9

SUBJECT: Sacramento County Public Works Agency - Kiefer Landfill Groundwater Extraction And Treatment Plant

BOARD ACTION: *Consideration of NPDES Permit Renewal and Time Schedule Order.*

BACKGROUND: The County of Sacramento (Discharger) owns and operates the Kiefer Landfill, a Class III solid waste disposal facility, which includes an on-site groundwater extraction and treatment system. The landfill is at the intersection of Grant Line Road and Kiefer Boulevard, in the eastern portion of Sacramento County, about 15 miles east of the City of Sacramento. A 1987 Solid Wastewater Quality Assessment Test indicated that disposal operations at the landfill have resulted in contamination of groundwater with volatile organic compounds (VOCs). The Discharger has been directed to remediate the groundwater under an approved Correction Action Plan (CAP) required under Cleanup and Abatement Order No. 91-725. The CAP called for the extraction and treatment of the contaminated groundwater. Treated groundwater is discharged to Deer Creek, a water of the United States and a tributary to the Cosumnes River.

The proposed Order includes new effluent limitations for manganese, aluminum, and organochlorine pesticides. The Discharger is unable to immediately comply with the new effluent limitations for manganese. Therefore, a Time Schedule Order is proposed to provide interim limitations and a time schedule for compliance.

ISSUES: The California Sportfishing Protection Alliance (CSPA) is contesting the proposed Permit. The major issues discussed in the public comments are summarized below:

Antidegradation Policy: CSPA contends that by failing to require an assessment of groundwater quality or groundwater monitoring in the proposed Permit, the Permit does not comply with the Regional Water Board's Antidegradation Policy.

The requirements in the proposed Order are protective of groundwater. The sedimentation basin is a very large stormwater retention basin for the landfill with a capacity of 300 acre-feet. The Discharger only diverts to the sedimentation basin during post-maintenance discharges, which occur about ten times per year and typically last 2 to 6 hours. The annual average discharge to the sedimentation basin is approximately 7 acre-feet. Due to the small volume discharged to the sedimentation basin, any groundwater impacts caused by the post-maintenance discharges are insignificant.

Acute and Chronic Toxicity: CSPA states that the proposed Permit contains an effluent limitation for acute toxicity that allows mortality, exceeding the Basin Plan water quality objective, and contends that the

reduction in acute toxicity monitoring from monthly to quarterly is based on an incomplete record and fails to consider instances of toxicity. CSPA also states that the Permit does not contain numeric effluent limitations for chronic toxicity in violation of federal regulations.

The proposed Order protects aquatic life beneficial uses by implementing numerous measures to control individual toxic pollutants and whole effluent toxicity (WET), including; (1) receiving water limits for toxicity, (2) end-of-pipe chemical specific-effluent limits for toxic pollutants, (3) acute toxicity effluent limitations that are consistent with U.S. EPA Region 9 guidance, and (4) chronic WET testing with a provision that requires the Discharger, if applicable, to investigate causes of, and identify corrective actions to eliminate effluent toxicity.

The proposed Order allows acute toxicity monitoring to be reduced from monthly to quarterly, based on acute toxicity data that shows the effluent is consistently not toxic. The proposed acute toxicity monitoring requirements are consistent with NPDES permits issued by the Regional Water Board for other groundwater extraction and treatment facilities. The reduction in monitoring frequency is in compliance with federal anti-backsliding regulations.

The proposed Order does not include numeric chronic toxicity effluent limitations, because the toxicity control provisions in the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP) are currently under revision, making it infeasible to develop the limits. Therefore, the proposed Order requires that the Discharger meet best management practices for compliance with the Basin Plan's narrative toxicity objective, as allowed under 40 C.F.R. 122.44(k).

Temperature: CSPA states that the Basin Plan's Deer Creek temperature objectives are not applicable to the discharge, because they were adopted based on information from the upstream Deer Creek Wastewater Treatment Plant.

The Deer Creek temperature objectives in the Basin Plan apply throughout Deer Creek, not just the upper reaches near the Deer Creek Wastewater Treatment Plant. The proposed Order implements the Basin Plan by including temperature receiving water limitations in accordance with the Basin Plan's site-specific objective for Deer Creek.

Volatile Organic Compounds (VOCs): CSPA contends that the Discharger does not provide best available technology (BAT) and best practicable treatment and control (BPTC) of the discharge as required by the Clean Water Act, federal regulations, and the California Water Code by failing to adequately treat VOCs. CSPA states that technology is available to treat VOCs to non-detectable concentrations on an instantaneous maximum basis.

The Discharger meets BAT and BPTC by utilizing air stripping towers to volatilize the VOCs, which can consistently reduce VOCs to less than 0.5 µg/L. The issue is not in the treatment technology, but rather in the averaging period for the proposed effluent limitation for VOCs. We agree that an effluent limitation for VOCs with a shorter averaging period is warranted. Therefore, the effluent limitations for VOCs have been changed from average monthly to maximum daily. An instantaneous maximum effluent limitation is not appropriate for VOCs, because compliance determination would require continuous monitoring, which is infeasible for VOCs.

Reasonable Potential Analysis: CSPA contends that the proposed permit contains an inadequate reasonable potential analysis (RPA) by using incorrect statistical multipliers in violation of federal regulations.

Staff conducted the RPA in accordance with Section 1.3 of the SIP. Although the SIP applies directly to the control of CTR priority pollutants, the State Water Board has held that the Regional Water Board may use the SIP as guidance for water quality-based toxics control of both CTR and non-CTR constituents.

Mgmt. Review _____

Legal Review _____

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